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April 6, 2004

Via Electronic Submission

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: Ex Parte Notice, ET Docket No. 00-258

Dear Ms. Dortch:

On April 2, Stephen R. Whitesell and Sandra Rhee Ross of VTech Holdings, Ltd., and the undersigned met with Bruce Franca and Karen Rackley of the Office of Engineering and Technology to discuss issues related to the above-referenced proceeding. Specifically, VTech raised objections to recommendations for revision of the rules for the Unlicensed Personal Communications Servics (UPCS) frequency band offered by the DECT Forum.

Copies of presentation materials distributed by VTech during the meeting are attached hereto for inclusion in the record of this proceeding.

Should you have any questions regarding this matter, please contact the undersigned.

Very truly yours

Robert L. Galbreath

For Powell, Goldstein, Frazer & Murphy LLP

RLG/anp
Attachments
Cc: Bruce Franca
Karen Rackley
Mark Esherick, Siemens (for DECT Forum)

Spectrum Reallocation

Comments on Use of UPCS Bands

ET Docket No. 00-258
April 2, 2004

Technology Leader

- **VTech is well known as an innovator of cordless telephone technology**
  - **First 900 MHz and 5.8 GHz cordless phones**
  - **First cordless phones with color LCD display**
  - **First cordless phones with downloadable pictures and recordable ringers**

Market Leader

- VTech brand
- Exclusive agreement to provide all wireline telephones for a global telecom leader
- When the VTech and the licensed brands are combined, VTech
  - has over 25% of the cordless telephone market share, and
  - is No. 1 in both revenue and number of units sold (20 million handsets annually)

Re: DECT Forum Proposal

- VTech also makes Digital Enhanced Cordless Telecommunications (DECT) products for the European market.
- However, VTech opposes additional Part 15 rules changes proposed by the DECT Forum to allow DECT operation in the 1915 to 1930 MHz UPCS band.

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Reasons for Opposition

- **Additional Part 15 rules changes**
  - **negatively impact channel availability for existing UPCS equipment, and**
  - **have not had a thorough airing**
- **DECT doesn't need to use UPCS band – can operate in ISM bands**
- **False and misleading claims of higher voice quality and "protected spectrum"**
- **Adds confusion with no added benefit**

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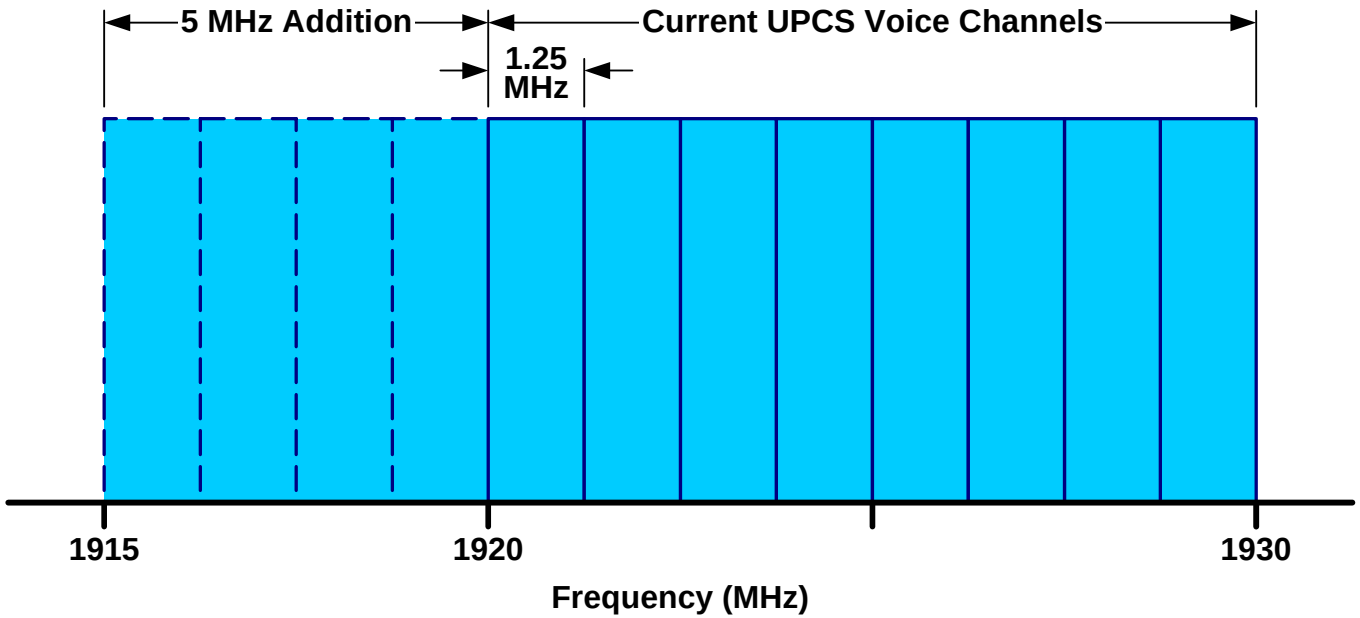
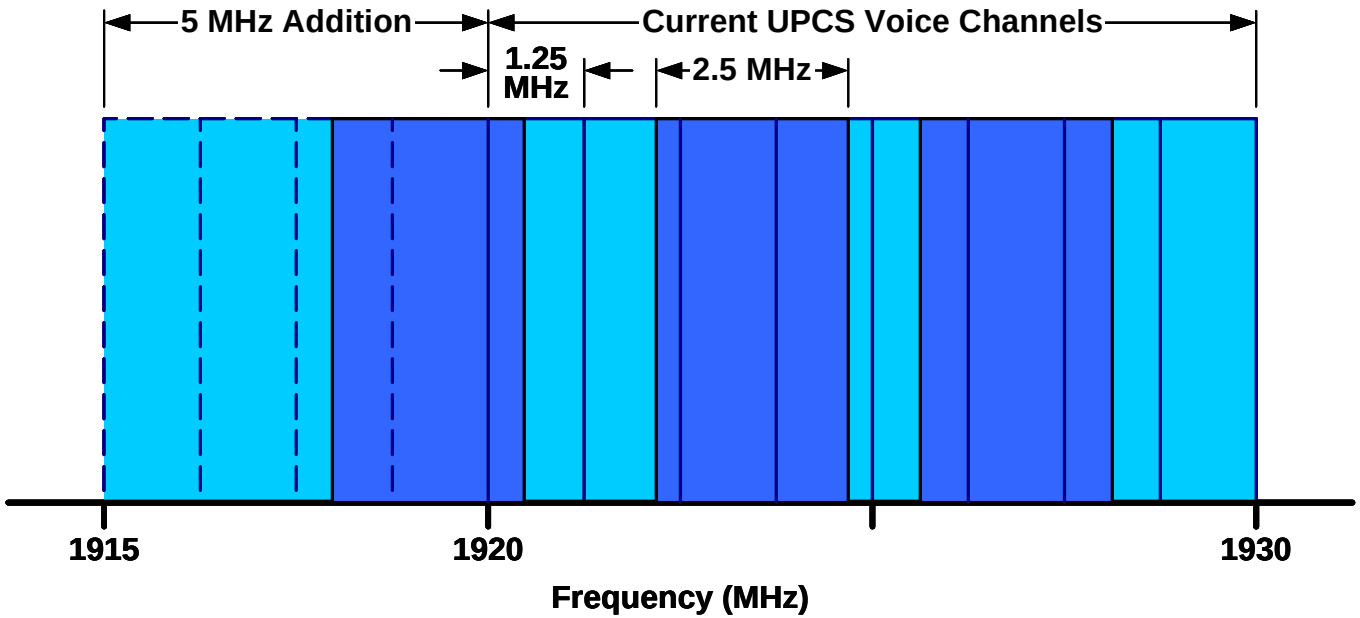
Reduces UPCS Channel Availability

- Intent of several other proposals is to increase number of UPCS channels available for voice applications
  - 1920-1930 MHz now supports 8 channels
  - 1915-1930 MHz would support 12 channels
- DECT Forum proposal would eliminate fixed channels and expand per-channel bandwidth from 1.25 to 2.5 MHz
  - Results in 2 or 3 UPCS channels being unavailable for each DECT channel in use

Channel Overlap



Channel Overlap



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Not Thoroughly Aired

- **Proposed additional Part 15 rules changes have an adverse effect on channel availability for existing UPCS products**
- **Details of proposal made as ex parte comments following Fourth NPRM in ET Docket No. 00-258.**
- **Some affected parties may not be aware of the proposal**

DECT Can Use ISM Bands

- **The European Telecommunications Standards Institute (ETSI) developed method for adapting DECT products to comply with ISM band rules (TS 101 948)**
- **Declared document "historical" after 2nd R&O in ET Docket No. 99-231 because**
  - **"Standard DECT implementations are now allowed on the US ISM frequency bands"**

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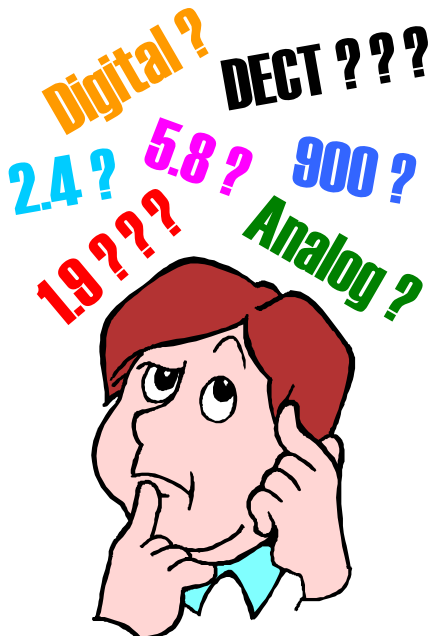
False and Misleading Claims

- **Claims UPCS etiquette rules provide "protected" spectrum and higher quality voice communication**
  - **The UPCS band is unlicensed and, therefore, unprotected**
  - **ISM band cordless telephones provide excellent voice quality**
    - **Use interference avoidance techniques such as spectrum monitoring and frequency swapping**
    - **Coexist with microwave ovens, WiFi products, and other users**

Adds Confusion without Benefit

- 900, 2.4, 5.8, Analog, Digital? Is bigger better? How does 1.9 fit? What is DECT?
- Fundamentally, DECT is a cordless telephone
- Added data transmission features like text messaging, picture downloading, and even streaming video can be done equally well in ISM bands



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Conclusions

- **DECT Forum proposal should be rejected**
  - **Proposed Part 15 rule changes adversely affect embedded UPCS products and have not been thoroughly aired**
  - **Not necessary for the introduction of DECT products**
  - **Would add further confusion to an already confused marketplace with no consumer benefit**
- **Public would be better served by several other proposals for reallocating the 1910-1920 MHz portion of the UPCS band**

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April 2, 2004

Supplemental Material for Ex Parte Presentation
on use of UPCS Bands – ET Docket No. 00-258

VTech is a major provider of innovative cordless telephones in the United States. Our technological advances include the first cordless telephones to operate in the 900 MHz and 5.8 GHz bands, the first to offer color LCD displays, and the first to offer downloadable pictures and recordable ringers. In addition to our own VTech brand, we have an exclusive license agreement to provide all wireline telephones sold under the brand name of a global telecom leader, including cordless telephones. When the two brands are combined, VTech has over 25% of the cordless telephone market share and is ranked No. 1 in both revenue and number of units sold. We sell 20 million cordless handsets annually in the U.S. VTech also manufactures Digital Enhanced Cordless Telecommunications (DECT) products for the European market.

We have become aware of ex parte comments filed by the DECT Forum ("DECT Comments")[1] following closure of the comment period for the *Fourth Notice of Proposed Rulemaking* in ET Docket No. 00-258 ("Fourth NPRM").[2] The DECT Comments propose additional technical changes to the Part 15 rules ("DECT Proposal") to allow operation of DECT cordless telephones in the Unlicensed Personal Communications Service ("UPCS") band from 1915 to 1930 MHz. We are also aware of earlier filings by Siemens and members of the DECT Forum related to this subject and of subsequent ex parte presentations to FCC staff by members of the DECT forum,[3] but the cited DECT Comments were the first to propose specific wording changes for the Part 15 rules. For the reasons described below, VTech is opposed to the additional Part 15 rules changes in the DECT Proposal.

The additional technical changes to the Part 15 rules in the DECT Proposal go well beyond the Commission's suggestions and the proposals from other commenters. In the Fourth NPRM, the commission proposes deleting the rule provisions for asynchronous devices operating in the 1910-1920 and 2390-2400 MHz bands in order to make at least part of the 1910-1920 MHz band available for Advanced Wireless Services ("AWS"). In response to the

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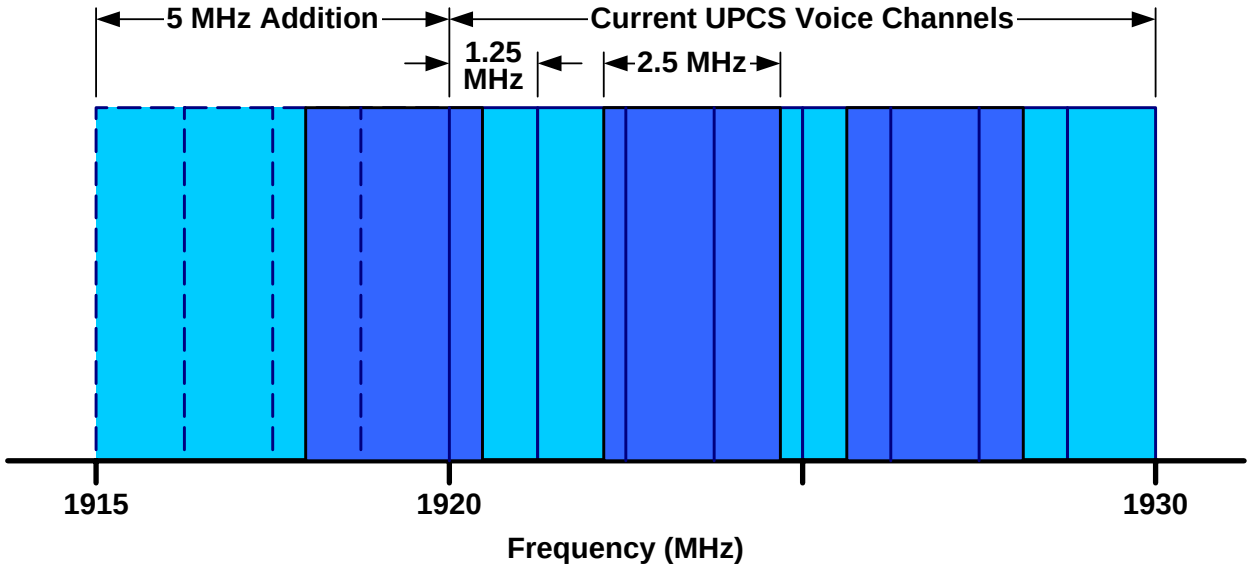
1 DECT Forum, "Recommendations of the DECT Forum for Revision of the Rules for the UPCS Band," ex parte filing in ET Docket No. 00-258, November 7, 2003.

2 *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems,* ET Docket No. 00-258, *Fourth Notice of Proposed Rulemaking,* FCC 03-134, 18 FCC Rcd 13235, 68 FR 52156 (September 2, 2003).

3 Siemens comments on Third NPRM filed April 14, 2003; meeting with OET personnel on July 16, 2003 by representatives from Siemens and the DECT Forum; meeting with OET personnel on December 10, 2003 by representatives from Siemens, Philips, TEM Consulting, UTAM, Ericsson, and the DECT Forum; separate meetings with Sheryl Wilkerson from Chairman Powell's office, Barry Ohlson from Commissioner Adelstein's office, Jennifer Manner from Commissioner Abernathy's office, and Sam Feder from Commissioner Martin's office on March 4, 2004 by representatives from Siemens and TEM Consulting; and meeting with OET personnel on March 4, 2004 by representatives from Ericsson, Siemens, TEM Consulting, and the DECT Forum.

Third Notice of Proposed Rulemaking in ET Docket No. 00-258 ("Third NPRM"),[4] several commenters had proposed adding the upper 5 MHz of the 1910-1920 MHz band to the existing 1920-1930 MHz UPCS band for isochronous use, making its band limits 1915-1930 MHz.[5] The DECT Comments support this change but go well beyond the other commenters' proposals and the scope of the Commission's suggestions in the Fourth NPRM by requesting several technical changes to the UPCS isochronous rules.

Most notably, the DECT Proposal would eliminate the eight fixed 1.25 MHz wide channels, which would become twelve 1.25 MHz wide channels with the proposal to add 5 MHz of bandwidth, in favor of non-fixed 2.5 MHz wide channels. As shown in the figure below, the effect would be to make two, and most likely three, of the 1.25 MHz channels used by current UPCS equipment unavailable whenever a single channel based on the DECT Proposal is in use.



This reduction in the number of available communications channels is counter to the intent of the other commenters who are seeking to add 5 MHz of bandwidth for isochronous UPCS use, and its ramifications should be thoroughly scrutinized before any consideration is given to the adoption of this proposal. Since the details of the DECT Proposal were made as ex parte comments following closure of the comment period on the Fourth NPRM, it is possible that affected parties may not be aware of the proposal and the adverse effect it has on channel availability for existing UPCS products.

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[4] *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems,* ET Docket No. 00-258, *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order,* FCC 03-16, 18 FCC Rcd 2223, 68 FR 12015 (March 13, 2003).

[5] See, for example, Comments filed by Cingular Wireless, Motorola, and the Wireless Communication Association in response to the Third NPRM. In some cases, the proposals are for isochronous UPCS use in the 1916-1930 MHz band instead of the 1915-1930 MHz band.

DECT products can operate in the ISM bands like other cordless telephones. In April 2001, the European Telecommunications Standards Institute ("ETSI") adopted technical specification TS 101 948 to describe how DECT technology could be adapted to comply with the FCC Part 15 rules.[6] According to its scope,

> "The prime objective for specifying DECT-ISM is to allow for introduction of a DECT-based technology in countries that have no spectrum allocated for DECT, but allow frequency hopping applications in the ISM band. The 2,4 GHz ISM band is available in all major markets worldwide."

Two years later, following the Commission's Second Report and Order in ET Docket No. 99-231 that allowed direct digital modulation in the 2.4 GHz ISM band,[7] ETSI decided there was no further need for TS 101 948 and added the following notation to its scope:[8]

> "The present document defining a DECT derivative with a frequency hopping overlay, mainly aimed for the North American market, will become obsolete and will be declared **historical** due to new US FCC part 15 rules. Standard DECT implementations are now allowed on the US ISM frequency bands 902 MHz to 928 MHz, 2 400 MHz to 2 483,5 MHz and 5 725 MHz to 5 850 MHz."

Thus, manufacturers of DECT cordless telephones can offer "standard implementations" of their products in the U.S. marketplace and do not need additional modifications to the Commission's Part 15 rules in order "for Americans to experience technological communication applications that are currently available in Europe and other parts of the world" as suggested by the DECT Comments.

The DECT Comments claim that UPCS etiquette rules provide "protected" spectrum and higher quality voice communication is false and misleading. The UPCS band is, by definition, unlicensed and, therefore, unprotected. Any equipment complying with the Part 15 rules for its use may operate within the band. The "listen before talk" etiquette required for the UPCS band is certainly not prohibited in the ISM bands. In fact, cordless telephones operating in the ISM bands frequently employ techniques such as spectrum monitoring and swapping of hopset frequencies to avoid interference. Specifically, VTech has developed "WiFi friendly" cordless telephones that can detect the presence of Wireless Local Area Networks (W-LANs) and move to other frequencies within the band. The net result is that cordless telephones being marketed today provide excellent quality voice communications while coexisting with WiFi products, microwave ovens, and other users of the ISM bands.

The DECT Proposal does little but further confuse an already confused marketplace with no real end-user benefit. Consumers today are faced with choices between analog and digital and between 900 MHz, 2.4 GHz and 5.8 GHz products when considering a cordless telephone purchase. Should I get analog or digital? Is 2.4 better than 900? Is 5.8 better than 2.4? Where

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[6] ETSI TS 101 948, *Digital Enhanced Cordless Telecommunications (DECT); DECT derivative for implementation in the 2,45 GHz ISM band (DECT-ISM),* v1.1.1, April 2001.

[7] *Amendment of Part 15 of the Commission's Rules Regarding Spread Spectrum Devices,* ET Docket No. 99-231, *Second Report and Order,* FCC 02-151, 17 FCC Rcd 10755, 67 FR 42730 (June 25, 2002).

[8] ETSI TS 101 948, *Digital Enhanced Cordless Telecommunications (DECT); DECT derivative for implementation in the 2,45 GHz ISM band (DECT-ISM),* v1.1.2, April 2003.

would 1.9 fit in? The consumer is often under the impression that bigger (in this case higher frequency) is better, while the fact is that cordless telephones are capable of providing similar levels of performance in all three of the Industrial, Scientific and Medical ("ISM") frequency bands. Would DECT phones operating in the UPCS band offer the consumer some new capability or level of performance that current cordless telephones operating in the ISM bands do not? Despite claims by the DECT Forum to the contrary, the answer is a resounding NO! DECT products are fundamentally cordless telephones. Additional data transmission features like text messaging, picture downloading, and even streaming video can be done equally well in the ISM bands, as innovative VTech products, the explosion of WiFi offerings, and even an ETSI specification for DECT operation in these bands attest.

In summary, the DECT Proposal should be rejected. The public would be better served by reallocating the 1910-1920 MHz portion of the UPCS band to uses suggested by other commenters. As noted previously, several commenters have suggested expanding the UPCS band to 1915-1930 MHz under the present rules for isochronous use and giving the 1910-1915 MHz band over to other uses such as AWS, licensed PCS, or the Multipoint Distribution Service ("MDS"). Each of these arguments has some merit, and they have the common viewpoint of expanding the UPCS band by 5 MHz without materially changing the technical rules, thus increasing the number of available UPCS channels by 50%. Still others have proposed giving the entire 1910-1920 MHz band over for Community Wireless applications.[9] This argument also has some merit from the viewpoint of making wireless access available where it might otherwise not exist. Any of these alternatives would provide a greater public good than adding another frequency band for cordless telephone operation, which would only add to the marketplace confusion without providing a real benefit to the consumer.

[9] See, for example, Reply Comments filed by Midstate Communications, Penasco Valley Telephone, and UTStarcom in response to the Third NPRM.